

NYSDOH Health Information Infrastructure

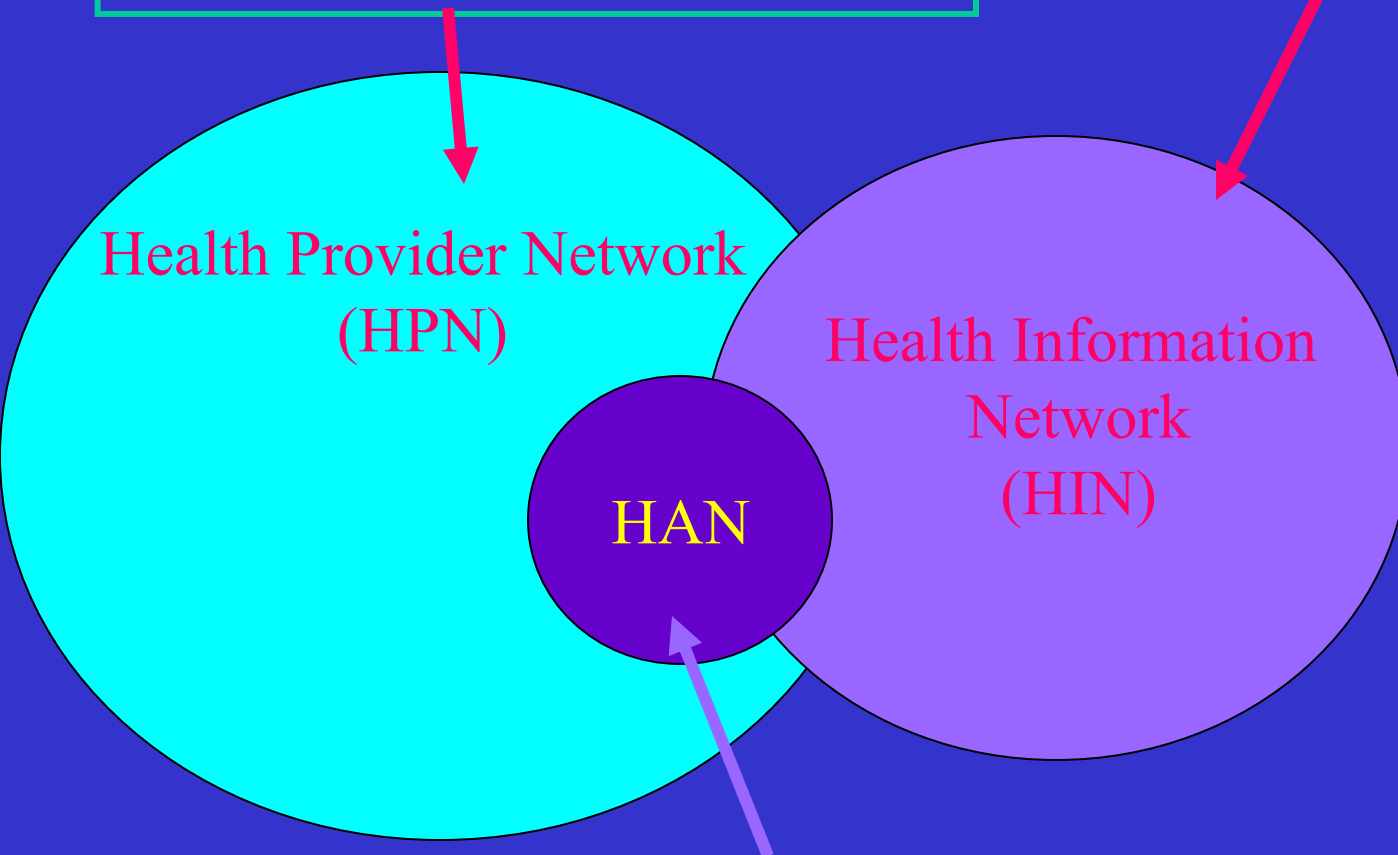
Public Health Messaging
Report on a work in progress

Partnership

- Centers for Disease Control
- NY City DOH
- NYSDOH
 - Division of Epidemiology (ECLRS)
 - Office of Health Systems Management
 - Office of Public Health/ BT Preparedness
- External Partners - GNYHA

Health Provider Network (HPN)
Integrated Information Systems,
Electronic Surveillance and
Reporting for Health Care Providers

Health Information Network (HIN)
Integrated Information Systems,
Electronic Surveillance and
Reporting for Local Health Departments



Health Alert Network (HAN)
Public Health Preparedness

Organizations Using HPN/HIN

20,000 accounts (currently)

- Local Health (County and NYCity) (all)
- Nursing Homes (all)
- Hospitals (all)
- Physicians (6,000 + others in process: 20,000-30,000)
- MCOs (all)
- Federal Agencies (US CDC, HCFA)
- Local Social Service Units (200, others in process)
- Others
 - Clinical & Environmental Labs (120 + others in process)
 - Pharmacies (200 +)

100 applications -Examples

❑ Bioterrorism Preparedness

- 📄 Health Alert Network
- 📄 ER Surveillance (early warning system)
- 📄 Environmental Anthrax lab results
- 📄 HERDS, NYSDOH PVS

❑ Laboratory reporting

- 📄 Electronic Clinical laboratory reporting(ECLRS)
- 📄 BT suspect case reporting
- 📄 Blood lead laboratory

❑ Disease Surveillance

- 📄 Disease Outbreak alerts
- 📄 NEDSS Charter site
- 📄 West Nile Virus surveillance (human, bird, mammal)
- 📄 Communicable disease reporting , Nosocomial reproting
- 📄 STD case reports
- 📄 TB case reports

❑ Health care Surveillance

- 📄 Physician Profile
- 📄 NYPORTS
- 📄 Medical malpractice reporting

Example Applications

❑ Managed Care

- ☞ Managed Care provider network surveys
- ☞ Managed care: encounter data system, DSS, Certification and Surveillance Reporting

❑ Health care Finance

- ☞ Cost reports(Nursing homes, Hospitals), Budget surveys,etc.
- ☞ Child Health Plus Insurance

❑ Data Queries

- ☞ SPARCS and Vital records (Birth and Death)
- ☞ Time series analyses of Hospital admits from Emergency rooms
- ☞ Community Health profiles

❑ Hospital reporting

- ☞ SPARCS inpatient hospital stays
- ☞ Emergency room reporting (2003)
- ☞ Cancer registry

❑ Vital records

- ☞ Statewide Perinatal Data System and Electronic Birth certificate

❑ Other

- ☞ Electronic triplicate prescription data submission

Current Mechanisms for data exchange

- Web Browser
 - Forms
 - Reports
 - Static documents
- Secure file upload/download over https(manual process)

NY State Health Goal (B2B)

- Establish a means to automate secure exchange of health data (batch transmission) between NY State DOH and its information trading partners.
 - Using existing Secure Health commerce infrastructure.
 - Minimize invasion of end user(facility) architecture
 - Standards based
 - Enterprise-wide approach for facility/lab – single method to automate exchange data with State DOH
 - Reasonable implementation cost (?)
- Automate exchange of alerts (future)

Immediate Project objectives for Automated messaging (B2B)

- Electronic Laboratory Reporting – *interface existing NYSDOH ECLRS system with automated file transfer*
- Emergency Department Syndromic Surveillance
- Longer term
 - ED Admissions (Fall 2003)
 - Inpatient Hospital Admissions
 - Environmental data (EPHT)

Immediate Project – Partnership With NYCity DOH

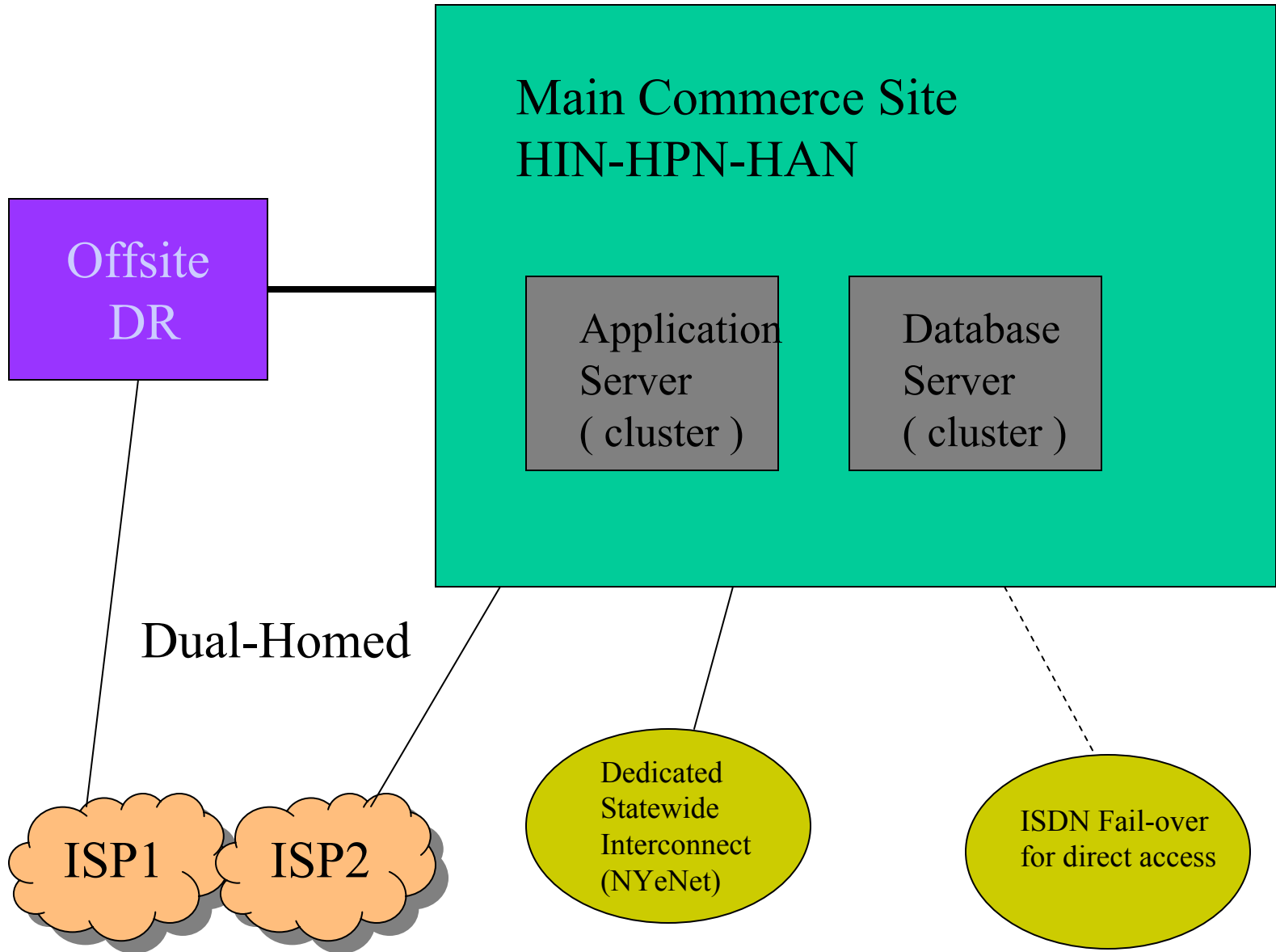
(non-trivial case implemented with non-trivial technology)

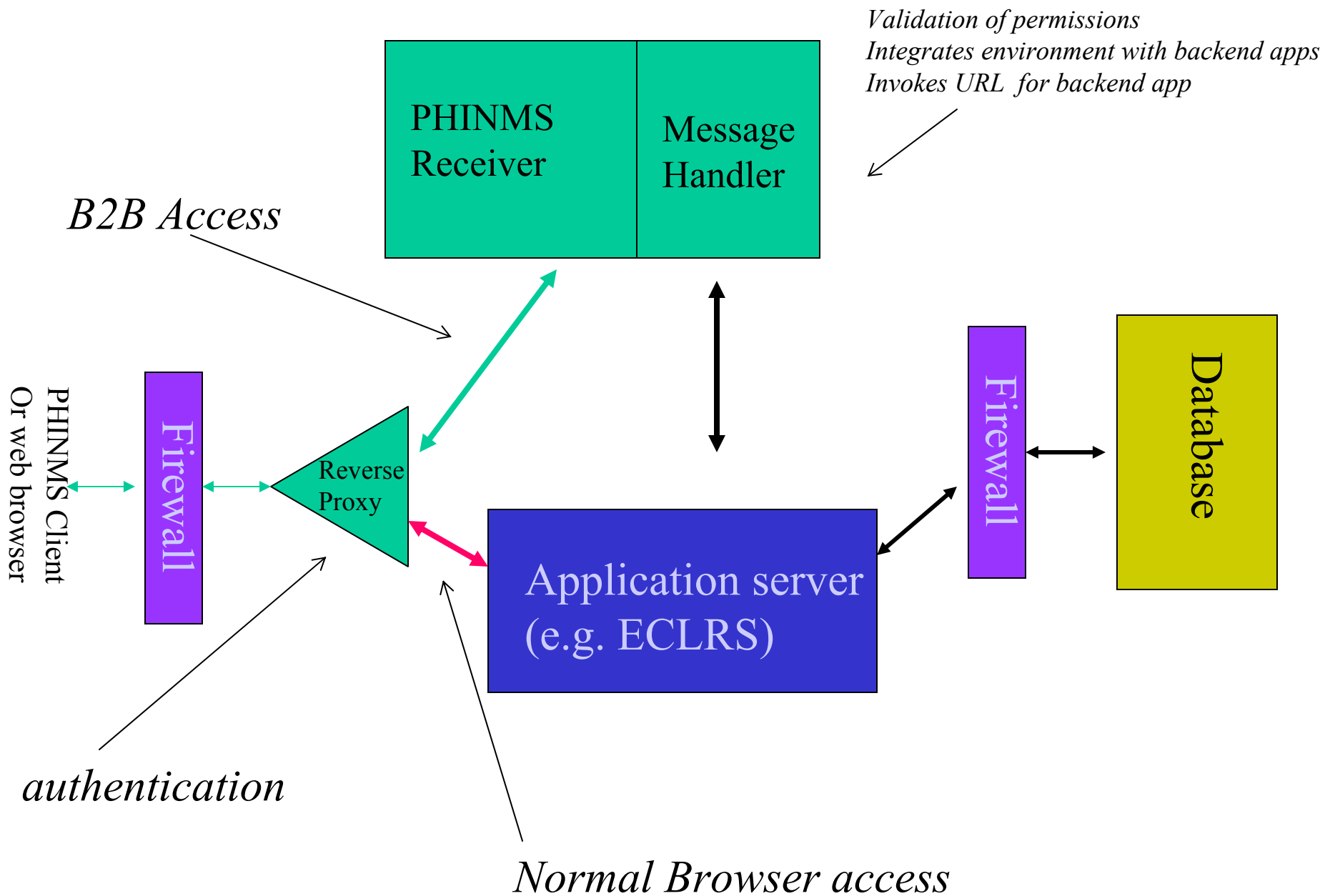
- Voluntary
- Cross Jurisdiction for Program
- Interaction with state regulatory agency
- Time critical
- Route lab results from mutual data exchange partners (aka NYS regulated hospitals/labs) through NYSDOH ECLRS to NYCity DOH.

PHNIMS

Implementation Considerations in NYS

- Must use single existing firewall port HTTPS/SSL
- Must use existing HIN/HPN authentication/access control system
 - Specialized security MOUS for B2B accounts
 - Facility security coordinators
 - Communications directory
 - DOH Program control over permissions for facilities to send data





Status

- Production availability
- Testing and Debugging collaboration
 - CDC
 - NYC DOH
- Application connectivity
 - Validate
 - ECLRS

Status

- Performance / load testing
 - Multiple simultaneous users , varying payload sizes
 - Validate
 - Posting HL7 messages to ECLRS
- Longevity tests
 - Validate
 - ECLRS

Outstanding Issues

- Non-trivial implementation (receiver and sender)
- Performance –Resource Limited
 - PHINMS receiver
 - Back end database server
 - Application server
- Application Server SW (scaling issues?)
- ‘Fat client’ installation on facility end
- Variability in facility firewall/proxy
- PHINMS application documentation, development and testing protocol. (Change control process)

Summary of PHINMS Activities in NY

- NYSDOH is committed to the architecture and believes that it will meet the enterprise health commerce needs.
- NYS are committed to a full partnership endeavor with CDC on PHINMS.
- Non-trivial. But the promised benefit to the health Facility is a single interface for data exchange.
- Implementation of PHINMS client/receiver is a work in progress. Additional work is needed to implement as a production class system